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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,770	11/15/2001	R. Dennis Nesbitt	P-5915	4535

24492 7590 01/25/2005

THE TOP-FLITE GOLF COMPANY, A WHOLLY OWNED
SUBSIDIARY OF CALLAWAY GOLF COMPANY
2180 RUTHERFORD ROAD
LEGAL DEPT
CARLSBAD, CA 92008-7328

EXAMINER

GORDON, RAEANN

ART UNIT PAPER NUMBER

3711

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/003,770
Filing Date: November 15, 2001
Appellant(s): NESBITT, R. DENNIS

Michelle Bugbee
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11-15-04.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

The rejection of claims s 2-7, 9-14, 16-19, and 21-23 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

5,508,350

CADORNIGA et al.

4-1996

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 2-7, 9-14, 16-18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraoka et al (Re 35,293). Regarding claim 2, Hiraoka discloses a golf ball comprising a core made from polybutadiene (A). Polybutadiene (A) may be commercially available BUNA CB 10 (col 1, lines 52-67). According to applicant's spec page 11, table 3 BUNA CB 10 has a solution viscosity of 140 ± 20 mPa*s. The COR value is an obvious feature since the polybutadiene is identical to applicant's.

Regarding claim 3, applicant appears to be claiming a method of production that is not relevant to the final product. However, any properties based on the polybutadiene are obvious since applicant's is identical to Hiraoka. Regarding claim 4, Hiraoka discloses a Mooney viscosity range from 45 to 90 (col 1, line 59) and applicant discloses BUNA CB 10 has a Mooney viscosity of 47 ± 5 (spec table 3). Regarding line 5, the golf ball includes a cover (col 2, lines 58-61). Regarding claim 6, the polybutadiene has a 1-4 cis content of 80% or more (col 1, lines 53-55) and applicant discloses BUNA CB 10 has a 1-4 cis content of 96% or more (page 11, table 3). Regarding claim 7, the core composition includes a second polybutadiene (B)(col 2, lines 1-5). Regarding claim 9, the COR value is an obvious feature since the polybutadiene is identical to applicant's. Regarding claim 10, Hiraoka discloses a golf ball comprising a core made from a polybutadiene (A). Polybutadiene (A) may be commercially available BUNA CB 10 (col 1, lines 52-67). According to applicant's spec page 11, table 3 BUNA CB 10 has a

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solution viscosity of 140 ± 20 . The COR value is an obvious feature since the polybutadiene is identical to applicant's. Regarding claim 11, the polybutadiene has a 1-4 cis content of 80% or more (col 1, lines 53-55) and applicant discloses BUNA CB 10 has a 1-4 cis content of 96% or more (page 11, table 3). Regarding claim 12, applicant appears to be claiming a method of production that is not relevant to the final product. However, any properties based on the polybutadiene are obvious since applicant's is identical to Hiraoka. Regarding claim 13, the core composition includes a second polybutadiene (B)(col 2, lines 1-5). Regarding claim 14, Hiroaka discloses a Mooney viscosity range from 45 to 90 (col 1, line 59) and applicant discloses BUNA CB 10 has a Mooney viscosity of 47 ± 5 (spec table 3). Regarding claims 16 and 17, Hiroaka discloses the method of making a golf ball including selecting BUNA CB 10 for the core material and molding the core composition (col. 2, lines 55-60). The performance features of the core are obvious since the material is identical to applicants. Regarding claim 18, the features of the polybutadiene are obvious since the material is identical to applicants. Regarding claim 19, Hiroaka discloses a Mooney viscosity range from 45 to 90 (col 1, line 59) and applicant discloses BUNA CB 10 has a Mooney viscosity of 47 ± 5 (spec table 3). Although Hiraoka does not disclose the COR, the feature is considered obvious since the first polybutadiene disclosed by applicant is identical to the polybutadiene disclosed by Hiroaka and the value is common in the golf ball art.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraoka et al (Re 35,293) in view of Cadorniga et al (5,508,350). Hiraoka discloses a golf ball comprising a core made from a polybutadiene (A) and a second polybutadiene

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(B)(col 2, lines 1-5). Hiroaka further discloses up to 25% of the second polybutadiene but does not disclose the range claimed by applicant. Cadorniga teaches 50% of two different polybutadienes in a golf ball core. One of ordinary skill in the art would vary the quantity of the polybutadienes to increase the COR of the core.

(11) Response to Argument

Appellant's invention is a golf ball comprising a core made from a polybutadiene, wherein the core exhibits a COR of at least 0.780. The polybutadiene used in the core exhibits a solution viscosity from about 90 to about 130 mPa*s. Appellant's specification discloses various types of BUNA CB polybutadiene rubbers that may be used in the core (see tables 1 and 2). The specification recites "Of the above described BUNA CB polybutadiene rubbers, the most preferred for a core composition is BUNA CB 10 polybutadiene rubber." (page 11, lines 1-2). Table 3 of appellant's specification gives a solution viscosity of 140 ± 20 or 120 to 160 for BUNA CB 10. The primary reference, Hiroaka, discloses a golf ball comprising a core made from a polybutadiene (A) such as commercially available BUNA CB 10 (col. 1, lines 60-67). Appellant argues Hiroaka does not disclose examples using BUNA CB 10. However, the disclosure of Hiroaka clearly supports the use of the polybutadiene in the core (col. 1, lines 52-67). Appellant further argues the COR values for the core of Hiroaka would not obviously be the same as the claimed invention because the materials are different. In order to prove the property (COR) as claimed by Appellant is an obvious feature of Hiroaka the specification must be analyzed to determine which polybutadienes are used

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in the instant invention. The use of BUNA CB 10 as the main ingredient or polybutadiene A in the core of Hiroaka and the instant invention is established. It is also clear that both golf ball cores include a second polybutadiene (B). Appellant provides an example with 100 parts of the BUNA CB 10 as the main ingredient (table 4) and also gives the option of adding a second polybutadiene (page 12, lines 10-20). Hiroaka discloses a core with 98 parts of BUNA CB 10 (poly A) and 2 parts of a second liquid polybutadiene. In regards to Appellant's second polybutadiene the specification recites, "The second polybutadiene rubber can be a second BUNA CB series polybutadiene rubber or a polybutadiene rubber **different** from the BUNA CB series polybutadiene rubbers." (page 12, lines 13-15). This is the only location in the specification that provides information regarding the second polybutadiene. Therefore, Appellant makes clear the dominant polybutadiene is polybutadiene A. Since there is no guidance or limitation regarding the type of polybutadiene required for the second polybutadiene (B) it is not clear why appellant argues the second polybutadiene relied on in Hiroaka is different from the polybutadiene of the instant invention. The second polybutadiene type is not claimed or disclosed, therefore, the term "polybutadiene" is the only limitation. Since Hiroaka discloses a second "polybutadiene" the limitation is satisfied. Therefor, the cores of the instant invention and Hiroaka would obviously have the same COR values. It is understood Hiroaka does not recognize increased COR provided by the use of BUNA CB 10 as pointed out by Appellant; however, patentability is not based on properties or features not recognized in the prior art. Patentability is based on structure.

Appellant further argues the second polybutadiene used in the core of Hiroaka is a liquid polybutadiene that will improve processability of the rubber but will lower the COR. First, Hiroaka discloses the use of the liquid polybutadiene (B) will improve processability during manufacturing but the final golf ball properties are not compromised. Hiroaka clearly discloses the composition provides excellent impact durability and hit feeling (col. 2, lines 63-67). Secondly, as previously stated, Appellant provides a broad range for the second polybutadiene without guidance for a particular type. Therefore, liquid polybutadienes are not excluded as an option for the second polybutadiene.

With respect to claims 21-23, Appellant argues the motivation for the combination of the primary reference with the secondary reference, Cadorniga. Applicant further argues there is no suggestion in Cadorniga to increase the amount of the second polybutadiene in the core composition. The primary reference, Hiroaka discloses the base claims and further includes ranges for polybutadienes A and B in the amounts from 98/2 to **75/25**. Applicant claims from **70/30** to 50/50. The smallest difference between the two ranges is about 5 parts. Cadorniga teaches 50/50 of polybutadienes A and B. It is clear that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the latter is appropriate. Cadorniga is cited

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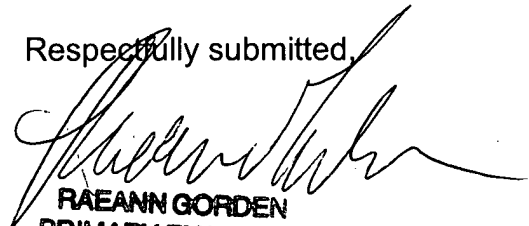
to teach that varying the quantity of two different polybutadienes in the core is not new or innovative.

In conclusion, it is submitted that Hiraoka clearly discloses a golf ball core comprising BUNA CB 10 as a first polybutadiene and a liquid polybutadiene as the second polybutadiene. The instant invention discloses a core comprising BUNA CB 10 and the option of adding a second polybutadiene of any kind. Since the materials as disclosed by Appellant are also disclosed by Hiraoka the COR values will obviously be the same as or overlap Appellant's range. Furthermore, while Appellant argues the materials are different it is submitted that Appellant's specification makes clear that any type of polybutadiene may be used as the second polybutadiene.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,




RAEANN GORDEN
PRIMARY EXAMINER

Rg

January 18, 2005

Conferees



GREGORY VIDOVIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700



JESSICA HARRISON
PRIMARY EXAMINER

MICHELLE BUGBEE, ASSOCIATE PATENT COUNSEL
SPALDING SPORTS WORLDWIDE INC
425 MEADOW STREET
PO BOX 901
CHICOPEE, MA 01021-0901